

SR 539/I-5 Improved Access Analysis Executive Summary

The Washington State Department of Transportation (WSDOT) conducted an analysis of the SR 539 Corridor from the I-5 interchange to Horton Road to determine whether the construction of a new interchange on I-5 at Smith Road would relieve traffic congestion on SR 539. The analysis is based upon the travel demand and travel patterns forecasted by the Whatcom Council of Governments (WCOG) for roadways in Whatcom County for the year 2035.



Key Assumptions

The analysis is based upon the following key assumptions:

- Whatcom County will experience a continuing increase in population and employment through the year 2035 as forecasted by the Cities of Bellingham, Ferndale, Lynden, Whatcom County and surrounding communities. Whatcom County population will grow from about 180,000 residents today to approximately 270,000 residents by the year 2035. Most of this growth will occur within the urban growth boundary including the areas adjacent to the SR 539 Corridor.
- By the year 2035, the Cordata mixed use planned unit development will be completed and will consist of mixed use office, retail and residential development north of the Bellis Fair Mall and adjacent to the SR 539 Corridor.
- The future 2035 roadway network will include the completion of local roadway improvements currently funded by local governments (cities and county) but will not include any new capacity improvements to I-5.

Key Findings

Key findings of the SR 539/I-5 Improved Access Analysis include:

- Traffic congestion on the SR 539 Corridor results from a wide range of factors including the construction of dense commercial and retail development alongside the corridor; high volumes of auto and freight traffic and vehicles turning within the corridor; closely spaced intersections; multiple driveways and entry points along the corridor; and, the attractiveness of SR 539 for local, freight and regional trip making.
- The construction of a new freeway interchange at I-5/Smith Road would not relieve traffic congestion on SR 539 between I-5 and Smith Road. Modeling indicates that local trips on the southern half of the SR 539 Corridor (Smith Road to I-5) are destined to and/or originate within the SR 539 corridor and/or in close proximity to the corridor. Regional trips traveling north or south on SR 539 experience no travel advantage from the Smith Road interchange and are unlikely to divert from the SR 539 Corridor.

- Other local roadway connections improve access and circulation to the Cordata area and depending upon configuration and location, improved local roadway connections could provide some benefits to SR 539. The SR 539/I-5 Improved Access analysis evaluated the extension of Slater Road east to SR 539 and the extension of Horton Road from Northwest Drive to Hannegan Road. Modeling indicated that the Horton Road extension would reduce traffic volumes on Bakerview Road and to a lesser extent it would also reduce some traffic volume on SR 539.
- The Smith Interchange is too far north to have any significant impact on travel patterns and traffic volumes in the congested sections of the SR 539 corridor south of Smith Road.
- Adding capacity (i.e., additional lanes) to SR 539 attracts additional trips to the corridor from parallel arterials, but results in little or no reduction in congestion levels on SR 539.

Study Recommendations

The construction of a new interstate interchange at I-5/Smith Road will not address congestion, mobility and safety problems within the SR 539 Corridor. It should not be considered a viable option to relieve traffic congestion on SR 539. WSDOT will pursue other potential strategies to improve safety and relieve congestion on SR 539 including but not limited to the following:

- The evaluation of short term, lower cost, improvements such as access control, signal timing, channelization and signage.
- The evaluation of options to improve safety and reduce accidents at the I-5/SR 539 interchange including the high accident northbound off-ramp onto SR 539. This may include reconfiguration of the interchange, channelization and/or signal timing improvements.
- The continuation of discussions with City and County public works staff to evaluate and support local street and roadway improvements that improve access to the Cordata PUD area that have the potential to reduce trips onto SR 539.
- The installation of traffic management devices (cameras, variable message signs, data stations) and data collection equipment along the SR 539 Corridor to improve the efficiency and management of the traffic signal system and surrounding roadway system. A traffic management system would provide improved monitoring of traffic volumes and freight movements through the corridor.
- Partner with Whatcom Transit Authority (WTA) to improve transit facilities and transit service and access within the corridor.
- Develop policy guidelines for prioritizing the movement of people, goods and services within the corridor and to balance the competing needs of safety, mobility, access and throughput.

These options will be evaluated and considered as part of the Phase II Interstate Master Plan analysis conducted for I-5 between Slater Road and Fairhaven.